

What is claimed is :

Sub A1

1. An audio menu display method of a DTV (Digital Television),
comprising :

5 detecting a connection state of audio output terminals ;
getting audio source information from audio source content received from
the DTV ;

determining usable audio menus for displaying on a certain screen in
accordance with the connection state and audio source information ; and

10 displaying only the determined usable audio menus on the screen.

2. The audio display method of the DTV according to claim 1,
wherein the audio output terminals are speaker output terminals or monitor output
terminals.

15 3. The audio display method of the DTV according to claim 1,
wherein the connection state is the number of speakers connected to the speaker
output terminals or the number of outer amplifiers connected to the monitor output
terminals.

20 4. The audio display method of the DTV according to claim 1,
wherein the detecting process further comprises detecting an audio input by a user
and the content of the audio source.

25 5. The audio display method of the DTV according to claim 4,

Sub A Cont wherein the audio input is varied in accordance with channel alternation of the user.

6. The audio display method of the DTV according to claim 4,
5 wherein the content of the audio source is a broadcast program.

7. The audio display method of the DTV according to claim 1,
wherein the audio source is a satellite broadcast, a terrestrial broadcast, a digital
signal, and an analog signal.

8. The audio display method of the DTV according to claim 7,
wherein the audio source information is gotten by referencing program information
or content of an audio stream in an ATSC or the satellite broadcast, and the digital
signal is gotten by referencing the content of a digital signal stream.

9. The audio display method of the DTV according to claim 1,
wherein the audio menu determining process further comprises detecting process
for detecting the number of channels, whether or not a prologic encoding,
existence of a subwoofer channel, existence of a multilingual service, existence of
20 additional audio services etc. when the audio source is encoded with an AC-3.

10. The audio display method of the DTV according to claim 9,
wherein the audio menu determining process further comprises detecting process
for detecting whether or not stereo/mono when the audio source is not encoded
25 with the AC-3.

Sub A
Concl.

11. The audio display method of the DTV according to claim 1, wherein the audio menu determining process is determined when the user alters a channel during audition or a program is changed.

5

12. The audio display method of the DTV according to claim 1, wherein the audio menu determining process is altered whenever the user changes an audio input.

10

13. The audio display method of the DTV according to claim 1, wherein the audio menu determining process checks the number of channels and kind of services when the audio source is an AC-3/MPEG.

15

14. An audio menu display apparatus of a DTV for outputting video and audio by being inputted outer signal source, comprising :

a display for displaying video ;

audio output terminals for outputting an audio signal to an outer speaker through the outer speaker or an outer amplifier ; and

20

a CPU for displaying an audio menu on the display by detecting a connection state of the outer speaker or outer amplifier connected to the audio output terminal.

25

15. The audio display apparatus of the DTV according to claim 14, wherein the audio output terminals comprise a speaker output terminal for connecting to the speaker and a monitor output terminal for connecting to the

outer amplifier.

16. The audio display apparatus of the DTV according to claim 14,
wherein female connectors of the audio output terminals are switches having a clip
5 form for connecting a data signal or a grounding signal mechanically.

Add A1

09800739-030801

10

15

20

25